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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,952	02/13/2004	Yee-Chung Fu	ANS-P105	9153
32566	7590	02/23/2006	EXAMINER	
PATENT LAW GROUP LLP 2635 NORTH FIRST STREET SUITE 223 SAN JOSE, CA 95134			WILSON, ALLAN R	
			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/779,952

Applicant(s)

FU, YEE-CHUNG

Examiner

Allan R. Wilson

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-33 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-33 is/are allowed.
- 6) ☒ Claim(s) 2,6,9-14 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4,5,7,8 and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1205 120105, 121905
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

As a result of the RCE and IDS filed on December 19, 2005, claims 2 and 17 are withdrawn from allowance and the following action is taken.

#### ***Election/Restrictions***

Claim 3 is withdrawn per MPEP § 819: The general policy of the Office is not to permit the applicant to shift to claiming another invention after an election is once made and action given on the elected subject matter. Note that the applicant cannot, as a matter of right, file a request for continued examination (RCE) to obtain continued examination on the basis of claims that are independent and distinct from the claims previously claimed and examined (i.e., applicant cannot switch inventions by way of an RCE as a matter of right). When claims are presented which the examiner holds are drawn to an invention other than the one elected, he or she should treat the claims as outlined in MPEP § 821.03.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2815

Claims 2, 6, 9-14 and 16-18 are rejected under 35 USC § 103 (a) as being unpatentable over U.S. Patent Application Publication No. 2004/0100679 to Kuo in view of European Patent Application Publication No. 1 275 997 to Kato et al. ("Kato," of record).

With regards to claim 2, Kuo illustrates in figures 1A-3G (entire document), particularly figure 1G, a mirror 101 having a first surface and a second surface, wherein the second surface comprises a reflective surface 124; a beam 128A connected to the mirror; a plurality of rotational comb teeth 104A connected to the beam; and a first spring 130A (Fig. 1G) connecting the beam to a first bonding pad 108A.

Kuo does not show a first surface comprises a plurality of trenches. Kato illustrates in figures 2-11J, particularly FIG. 2, a first surface 6 comprises a plurality of trenches 5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kuo with Kato to have a plurality of trenches. The motivation for this modification is improving the drive speed without deteriorating the rigidity of the mirror element (Kato paragraphs 1 and 7).

With regards to claim 6, Kuo illustrates in fig. 1G a second spring 130B connecting the beam to a second bonding pad 108B.

With regards to claim 9, Kuo illustrates in fig. 1G a first plurality of stationary comb teeth 103A, wherein the first plurality of stationary comb teeth and the plurality of rotational comb teeth 104A are interdigitated in-plane.

With regards to claim 10, Kuo illustrates in Fig. 1G and 1H the first plurality of rotational comb teeth 104 is coupled to a first steady 116 and the first plurality of stationary comb teeth 103 or 110 is coupled to a second steady 118 or oscillating voltage 120.

Art Unit: 2815

With regards to claims 11 and 13, Kuo illustrates in figs. 1B a second plurality of stationary comb teeth (in 109), wherein the second plurality of stationary comb teeth and the plurality of rotational comb teeth (in 105) are interdigitated out-of-plane to sense a capacitance.

With regards to claim 12, Kuo illustrates in figs. 1B the second plurality of stationary comb teeth (in 109) is coupled to a third oscillating voltage AC. ”

With regards to claim 14, Kuo illustrates Fig. 1C (paragraph 18) the beam 102 further comprises a plurality of holes 114 .

With regards to claim 16, Kuo illustrates in at least Figs. 1A-1C a gap surrounding the mirror 124 has a width greater than gaps around other components on the same layer as the mirror.

With regards to claim 17, Kuo illustrates in FIG. 2 the trenches 5B, 5C are located along an outer perimeter of the mirror.

With regards to claim 18, the examiner had to assume what the product would be by the process claimed. For example, in claim 18 it was assumed that the product was trenches. The claim that it was “etched trenches and laser trimmed trenches” was not considered to have full patentable weight. A “product by process” claim is directed to the product per se, no matter how actually made, MPEP 2113 “Product-by-Process Claims,” In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90; In re Marosi et al, 218 USPQ 289; and particularly In re Thorpe, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a “product by process” claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether

Art Unit: 2815

claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above case law makes clear.

***Allowable Subject Matter***

Claims 19-33 are allowable.

Claims 4, 5, 7, 8 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from an examiner should be directed to Primary Examiner Allan Wilson whose telephone number is (571) 272-1738. Examiner Wilson can normally be reached 7:00-4:00 Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Parker can be reached on (571) 272-2298. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2815

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in dark ink, appearing to read 'A. Wilson', with a long horizontal flourish extending to the right.

Allan R. Wilson  
Primary Examiner  
February 21, 2006